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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/502,211	12/22/2004	Frank Schou	10191/3635	9174
26646	7590	02/06/2006	EXAMINER KAPLAN, HAL IRA	
KENYON & KENYON LLP ONE BROADWAY NEW YORK, NY 10004			ART UNIT 2836	PAPER NUMBER

DATE MAILED: 02/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/502,211

Applicant(s)

SCHOU, FRANK

Examiner

Hal I. Kaplan

Art Unit

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– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 July 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7/19/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file. A translation of the international application into the English language, as required by 35 U.S.C. 371(c)(2), was not received. The marked-up version of the substitute specification referred to in applicant's Remarks, filed July 19, 2004, was not received.

Specification

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

3. The disclosure is objected to because of the following informalities: Page 3, line 18 contains the abbreviation "EMC". This should be written out before being used as an abbreviation. Page 3, line 22 contains the phrase "claim 1". It appears this should read "claim 10".

Appropriate correction is required.

Drawings

4. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

5. Claim 10 is objected to because of the following informalities: Claim 10, line 8 contains the phrase "to thereto". It appears this should be "thereto". Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 10-18 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 10 recites the limitation "...the motor vehicle electric supply voltage is applied directly as a charging voltage to the reserve storage energy accumulator and is applied as an input direct voltage to the step-down regulator". Claim 11 recites the limitation "the reserve voltage is applied directly as input direct voltage to the at least one step-down regulator...". Claim 14 recites the limitation "...a plurality of step-down regulators to which the ... supply voltage is applied as an input direct voltage". Claim 15 recites the limitation "...the reserve voltage is applied directly as an input direct voltage to the plurality of step-down regulators". The specification and drawings, however, clearly show that the supply voltage is not applied directly to the reserve storage energy accumulator or to the step-down regulator(s), but rather is applied to both the reserve storage energy accumulator and the step-down regulator(s) via a non-reversible diode (1) (see page 4, lines 12-13 and 25-27; page 5, lines 24-26; and Figures 2 and 3). Claims 12, 13, and 16-18 inherit this deficiency.

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 10-18 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: the motor vehicle electric system supply voltage being directly connected to both the reserve energy accumulator and the step-down regulator(s), as set forth above.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

12. Claims 10, 11, 14, 15, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over the US patent of Boezen et al. (6,512,308) in view of the US patent application publication of Jehlicka et al. (2003/0145256).

As to claims 10 and 11, Boezen, drawn to a fault tolerant air bag bus system without transformer, teaches, in Figure 3, a reserve energy accumulator (14) to which a charging voltage higher than the internal normal DC voltage is applied during regular operation and which, in the event of failure of the motor vehicle electric system supply voltage (18), delivers a reserve voltage with which operation of at least one of the electronic circuits (6,8) can be maintained for a period of time; and a step-down regulator (20) that steps down an input direct voltage applied thereto to the internal normal DC voltage (see column 1, lines 16-26). Boezen does not disclose the motor

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vehicle electric supply voltage being applied directly as a charging voltage to the reserve storage energy accumulator, or as an input direct voltage to the step-down regulator.

Jehlicka, drawn to an error detection device for a multi-voltage vehicle power supply, teaches, in Figure 1, a vehicle electrical system comprising a high-voltage bus (38) and a low-voltage bus (26) (see paragraph 11, lines 1-3 and 16-22). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to connect the reserve storage energy accumulator and step-down regulator of Boezen directly to a high-voltage bus having the required reserve energy accumulator charging voltage, such as that taught by Jehlicka, instead of connecting them to a low supply voltage via a step-up converter, in order to reduce the number of parts.

As to claims 14 and 15, the prior art of record does not teach a plurality of step-down regulators, but it would have been obvious to one of ordinary skill in the art, at the time of the invention, to connect a plurality of step-down regulators for maintaining a plurality of internal normal DC voltages, because it has been held that mere duplication of parts has no patentable significance unless a new and unexpected result is produced. *In re Harza*, 274 F.2d 669, 124 USPQ 378 (CCPA 1960). See MPEP §2144.04(VI)(B).

As to claim 18, the reserve energy accumulator of Boezen includes a capacitor (14) (see column 1, lines 16-20).

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Conclusion

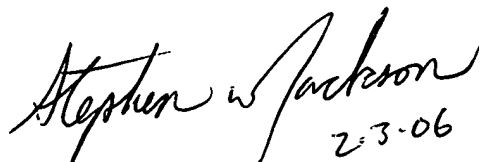
13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US patents to Suzuki (5,563,479), King et al. (5,710,699), Jungreis et al. (6,369,461), and Amano et al. (6,861,767) teach similar devices.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hal I. Kaplan whose telephone number is 571-272-8587. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on 571-272-2800 x36. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

hik

Handwritten signature of Stephen W. Jackson in cursive script, with the date 2-3-06 written below it.

STEPHEN W. JACKSON
PRIMARY EXAMINER